Broadcast Products
Technical Bulletin 20-2004-025R2

DATE: **February 14, 2005**

SUBJECT: **PICTURE DISAPPEARS WHEN SDI SIGNAL IS INPUT FROM HDCU-900**

MODEL: **BKM-120D**
BKM-120D/1

SERIAL NO:

BKM-120D	2,000,001–2,011,752
BKM-120D/1	2,200,001–2,206,936

DESCRIPTION

CAUTION: This technical bulletin is for reference purposes only. Do not implement the modification procedure below; otherwise, switching noise may appear on the picture when changing input signals with a switching device. Instead, implement the procedures described in Technical Bulletins:

- 20-2004-165, and
- 20-2005-012

When the HDCU-900 camera control unit is turned ON and HDCU-900 SDI output is connected to BVM-D9H/BKM-120D SDI input, an irregular D1-SDI signal may be input from HDCU-900. As a result, the V-STOP circuit protector for BVM-D9H/BKM-120D operates, and the picture disappears from the screen.

Symptom Details

BKM-120D creates H-Sync and V-Sync signals from the output of the SDI decoder IC (CXD8386AQ). These H/V-Sync signals are used to determine whether or not the reception signal is appropriate using the SYNC and DPR signals that are available from the SDI reception IC (CXB1342R). This determination controls the ON/OFF operation of the signal at a later stage.

When HDCU-900 power is turned ON, an irregular SDI signal is input from HDCU-900 SDI output to the SDI reception IC for BKM-120D. Because the SYNC and DPR signals from the SDI reception IC are at the same level as a regular SDI input signal, the reception signal is recognized as normal, which allows the H/V-Sync signals to turn ON.

The H-Sync signal created from the output of the SDI decoder IC is output correctly; however, the V-Sync signal is not output because of the irregular SDI input signal. As a result, the unit receives an H-Sync signal without a V-Sync signal, forcing the V-STOP circuit protector to operate.

MODIFICATION PROCEDURE

BD Board (Side A)

(See Figure 1.)

1. Cut the trace between R162 (zone A-2) and the base of Q338 (side B).
2. Solder a jumper between IC208 pin 31 (zone C-2) and the land connected to the base of Q338 as shown in Figure 1.

DPMO03-049R2

BD BOARD
SIDE A, ZONE A-2

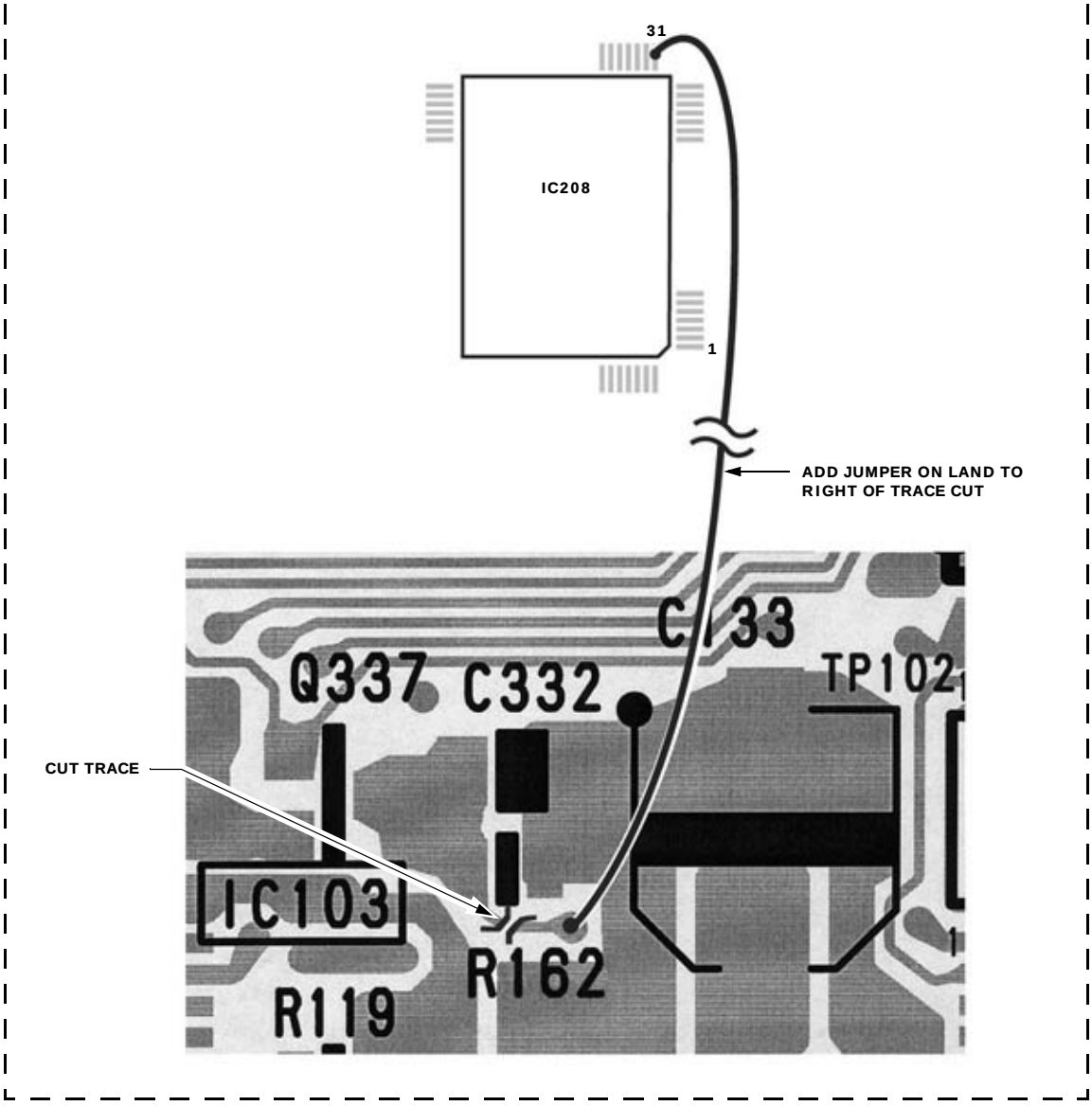

Figure 1